1	2	3
4.	Cogeneration-bagasse	5,000
5.	Waste to Energy	7,000
6.	Solar Power	50,000[3]
	TOTAL	1,83,000

MW=Megawatt;

Note:—Basis for deriving the Interactive Estimated Potential:

1. From around 20mha of wastelands yielding 10MT/ha/annum of woody biomass giving 4000 k-cal/kg with system efficiency of 30% and 75% PLF. In order to realize the estimated potential a major inter-Ministerial initiative involving, among others, Agriculture, Rural Development, Panchayati Raj, Environment and Forests would be required.
2. Sites with wind densities of 250 W/m2 or higher with 3% of assessed area available for wind farms requiring 12 ha/MW. The technically feasible potential for grid-interactive power could be lower if sites with wind densities of 300 W/m2 or higher are considered as suitable in keeping with international practice.
3. Depending on future developments making solar technology cost-competitive for grid power applications.

Implementation of solar energy schemes

3873. SHRI T.R. ZELIANG: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the details of welfare schemes and programmes being implemented under solar energy programme by Government in the country, particularly in the NER;

(b) the details of criteria/formula and guidelines adopted by Government to provide loans, grants and other assistance for the said purposes;

(c) the names of the schemes being implemented directly by Government/public undertakings/private undertakings in the NER under the Solar Energy Programme during the last three years and till-date; and

(d) the details of loans, financial grants allocated, sanctioned and the amount actually utilized by Government during the last three years, State-wise?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) to (c) The Ministry of Non-Conventional Energy Sources is implementing several programmes to promote use of solar energy devices and systems in the country including the North-Eastern region. The programmes are the Solar Photovoltaic Programme, Solar Photovoltaic Water Pumping Programme, Solar Lantern Programme and Solar Thermal Energy Programme. Under these programmes, financial assistance is being provided on purchase/installation of solar lanterns, solar home lighting systems, solar street lighting systems, solar pumping systems, certain photovoltaic devices/systems for urban areas, dish type solar cookers, air heating/steam generation systems, etc. The Ministry is also providing financial support for installation of solar water heating systems in the North-Eastern States including Sikkim, Jammu & Kashmir and the Islands.

In addition, a scheme on "Accelerated Development and Deployment of Solar Water Heating Systems in Domestic, Industrial and Commercial Sectors" is also being implemented under which soft loan is available to the beneficiaries through selected banks and Indian Renewable Energy Development Agency Ltd. (IREDA) for installation of solar water heating systems. Further, IREDA is also providing soft loans under the Renewable Energy Umbrella Financing scheme for the North Eastern Region at 5 per cent annual interest rate and infrastructure loan under Business Development Associate scheme for the North Eastern region at zero per cent interest rate.

The eligibility criteria and the quantum of support is different under different programmes. The Ministry provides financial support to the State agencies on the basis of proposals submitted and their past performance.

(d) The funds are sanctioned and released by the Ministry after utilization certificate for the funds released in previous years are obtained. The State-wise release of funds to the State agencies under the Solar Photovoltaic Programmes (lighting, lanterns, SPV pumps etc.), and Solar Thermal Energy Programmes (cooking, water heating, etc.) are given in the Statements I and II (*See* below). The details of loans sanctioned and disbursed by IREDA are given in Statement-III.

Statement-I

State-wise release of funds under SPV programmes during 2003-04, 2004-05 and 2005-06

(Rs. in lakhs)

Sl.No.	States/UTs	2003-04	2004-2005	2005-06
1.	Andhra Pradesh	33.52	—	41.33
2.	Arunachal Pradesh	45.12	—	30.81
3.	Assam	336.70	20.22	50.00
4.	Bihar	—	—	—
5.	Chhattisgarh	78.91	71.41	—
6.	Goa	18.63	—	—
7.	Gujarat	39.82	—	—
8.	Haryana	432.28	—	79.39
9.	Himachal Pradesh	102.63	88.00	—
10.	Jammu & Kashmir	131.15	173.24	—
11.	Jharkhand	66.32	—	5.91
12.	Karnataka	232.47	143.27	181.81
13.	Kerala	35.16	—	74.54
14.	Madhya Pradesh	2.62	25.87	—
15.	Maharashtra	—	18.00	21.1
16.	Manipur	208.53	—	24.98
17.	Meghalaya	43.00	—	154.76
18.	Mizoram	161.96	28.22	106.87
19.	Nagaland	—	—	6.98
20.	Orissa	—	—	2.26
21.	Punjab	1546.23	—	—
22.	Rajasthan	374.69	—	246.16
23.	Sikkim	31.59	26.00	—
24.	Tamil Nadu	304.72	—	—
25.	Tripura	213.06	—	1.71
26.	Uttar Pradesh	229.63	518.00	167.44
27.	Uttaranchal	349.75	—	178.42
28.	West Bengal	376.49	37.38	269.62
29.	A&N Islands	—	—	—
30.	Chandigarh	16.37	—	—
31.	Delhi	—	—	—
32.	Lakshadweep	—	—	—
33.	Pondicherry	3.78	1.65	5.1
34.	Others	443.45	337.81	866.31

Statement-II

State-wise release of funds under Solar Thermal Programmes during 2003-04, 2004-05 and 2005-06

(Rs. in lakhs)

Sl.No.	States/UTs	2003-04	2004-2005	2005-06
1.	Andhra Pradesh	5.24	21.94	3.97
2.	Arunachal Pradesh	11.00	—	22.12
3.	Bihar	1.37	—	—
4.	Chandigarh	0.52	—	0.08
5.	Chhattisgarh	6.62	0.13	14.16
6.	Delhi	3.09	6.40	1.00
7.	Gujarat	37.51	37.20	36.30
8.	Haryana	5.44	20.30	34.64
9.	Himachal Pradesh	10.50	0.30	1.77
10.	Jammu & Kashmir	5.85	0.10	3.20
11.	Karnataka	15.20	—	7.00
12.	Kerala	—	0.08	—
13.	Meghalaya	0.32	0.08	—
14.	Madhya Pradesh	13.76	2.50	0.50
15.	Maharashtra	17.85	27.36	10.37
16.	Mizoram	1.80	15.36	3.84
17.	Orissa	—	2.80	—
18.	Pondicherry	0.32	0.08	—
19.	Punjab	—	4.00	—
20.	Rajasthan	1.00	4.95	—
21.	Sikkim	0.37	—	7.88
22.	Tamil Nadu	17.27	4.15	35.23
23.	Uttar Pradesh	8.13	21.70	7.56
24.	Uttranchal	5.00	2.78	3.58
25.	West Bengal	6.43	3.79	—
26.	Others IREDA/Banks	815.00	515.00	2250.00

Statement-III

State-wise sanction and disbursement of Funds by IREDA under Solar Energy Programmes during 2003-04, 2004-05 and 2005-06

(Rs. in lakhs)

Sl. No.	State	2003-04		2004-05		2005-06	
		S*	D*	S	D	S	D
1.	Andhra Pradesh	0	23.76	0	15.26	0	4.46
2.	Arunachal Pradesh	0	0	0	0	0	0
3.	Bihar	0	0	0	0	0	0
4.	Chandigarh	0	0	0	0	0	0
5.	Chhattisgarh	0	0	0	0	0	0
6.	Delhi	0	20.25	0	14.19	0	0
7.	Gujarat	0	13.78	0	3.57	0	0
8.	Haryana	0	0	0	0	0	0
9.	Himachal Pradesh	0	0	0	0	0	0
10.	Jammu & Kashmir	0	0	0	0	0	0
11.	Karnataka	1225.73	1098.18	990.00	2006-46	700.53	533.90
12.	Kerala	0	7.19	0	0	0	0
13.	Meghalaya	0	0	0	0	0	0
14.	Madhya Pradesh	0	0	0	0	0	0
15.	Maharashtra	40.00	59.74	11.80	155.17	0	63.21
16.	Mizoram	0	0	0	0	0	0
17.	Orissa	0	0	0	0	0	0
18.	Pondicherry	0	0	0	0	0	0
19.	Punjab	0	0	0	0	0	0
20.	Rajasthan	0	66.85	0	6.51	0	0.87
21.	Sikkim	0	0	0	0	0	0
22.	Tamil Nadu						
23.	Uttar Pradesh	0	0	0	0	0	0
24.	Uttranchal	0	0	0	0	0	0
25.	West Bengal	0	0.89	0	61.82	0	3.52

S* : Sanctioned D* : Disbursed